Docket No. AUS9-2000-0546-US1

ABSTRACT OF THE DISCLOSURE

TRANSFERRING FOREIGN PROTOCOLS ACROSS A SYSTEM AREA NETWORK

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A method, system, and apparatus for processing foreign protocol requests, such as PCI transactions, across a system area network (SAN) utilizing a data packet protocol is provided while maintaining the other SAN traffic. In one embodiment, a HCA receives a request for a load or store operation from a processor to an I/O adapter using a protocol which is foreign to the system area network, such as a PCI bus protocol. The HCA encapsulates the request into a data packet and places appropriate headers and trailers in the data packet to ensure that the data packet is delivered across the SAN fabric to an appropriate TCA to which the requested I/O adapter is connected. The TCA receives the data packet, determines that it contains a foreign protocol request, and decodes the data packet to obtain the foreign protocol request. The foreign protocol request is then transmitted to the appropriate I/O adapter.